

Non-Linear Three-Dimensional Effects On Gravity-Wave Waves

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Comparison between the orographic response of the ECMWF model and the pyrex 1990 data. Quarterly Journal of the Royal Meteorological Society, 1995, 121, 1323-1348.	1.0	20
2	Linear theory of momentum fluxes in 3-D flows with turning of the mean wind with height. Quarterly Journal of the Royal Meteorological Society, 1995, 121, 1891-1902.	1.0	41
3	INTERNAL LEE WAVES AND TURBULENCE MIXING OVER AN ISOLATED SEAMOUNT: RESULTS FROM TURBULENCE ENERGY MODELS. International Journal for Numerical Methods in Fluids, 1996, 23, 1043-1072.	0.9	12
4	Critical Level Resonance in Three-Dimensional Flow past Isolated Mountains. Journals of the Atmospheric Sciences, 1997, 54, 1574-1588.	0.6	24
5	The Effect of Rotation and Surface Friction on Orographic Drag. Journals of the Atmospheric Sciences, 1997, 54, 193-210.	0.6	132
6	The Wake of St. Vincent. Journals of the Atmospheric Sciences, 1997, 54, 606-623.	0.6	92
7	Vortex Formation and Vortex Shedding in Continuously Stratified Flows past Isolated Topography. Journals of the Atmospheric Sciences, 1997, 54, 534-554.	0.6	170
8	A new subgrid-scale orographic drag parametrization: Its formulation and testing. Quarterly Journal of the Royal Meteorological Society, 1997, 123, 101-127.	1.0	535
9	Computation of 3-D stratified turbulent flow around a mountain. Environmental Modelling and Software, 1998, 13, 309-315.	1.9	1
10	A new gravity-wave-drag scheme incorporating anisotropic orography and low-level wave breaking: Impact upon the climate of the UK Meteorological Office Unified Model. Quarterly Journal of the Royal Meteorological Society, 1998, 124, 463-493.	1.0	108
11	The response of bora-type flow to sea surface temperature. Quarterly Journal of the Royal Meteorological Society, 1998, 124, 1227-1244.	1.0	50
12	Acoustic Filtering in Nonhydrostatic Pressure Coordinate Dynamics: A Variational Approach. Journals of the Atmospheric Sciences, 1998, 55, 654-668.	0.6	8
13	Lateral Momentum Transport by Orographic Gravity Waves. Journals of the Atmospheric Sciences, 1998, 55, 2623-2631.	0.6	0
14	Barrier Jets during TAMEX. Monthly Weather Review, 1998, 126, 959-971.	0.5	81
15	Linear mountain drag and averaged pseudo-momentum flux profiles in the presence of trapped lee waves. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 50, 12.	0.8	12
16	Gravity-wave drag produced by Madeira. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 1341-1357.	1.0	6
17	Do orographic gravity waves break in flows with uniform wind direction turning with height?. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 1695-1714.	1.0	28
18	Least action principle for a general, non-hydrostatic, compressible, acoustically non-filtered pressure-coordinate model. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 1903-1907.	1.0	0

#	ARTICLE	IF	CITATIONS
19	Momentum budgets over idealized orography with a non-hydrostatic anelastic model. II: Three-dimensional flows. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 2053-2073.	1.0	4
20	Responses of Different Nonhydrostatic, Pressure-Coordinate Models to Orographic Forcing. Journals of the Atmospheric Sciences, 1999, 56, 2553-2570.	0.6	8
21	Alleviation of Stationary Biases in a GCM through a Mountain Drag Parameterization Scheme and a Simple Representation of Mountain Lift Forces. Monthly Weather Review, 1999, 127, 788-801.	0.5	119
22	Three-Dimensional Numerical Simulations of Strongly Stratified Flow past Conical Orography. Journals of the Atmospheric Sciences, 2000, 57, 3716-3739.	0.6	24
23	Strongly Nonlinear Flow over and around a Three-Dimensional Mountain as a Function of the Horizontal Aspect Ratio. Journals of the Atmospheric Sciences, 2000, 57, 3971-3991.	0.6	58
24	The parametrization of drag induced by stratified flow over anisotropic orography. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 2353-2393.	1.0	159
25	The impact of flow regimes on asymmetry of orographic drag at moderate and low Rossby numbers. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 52, 365.	0.8	17
26	Vortex shedding behind tapered obstacles in neutral & stratified flow. Dynamics of Atmospheres and Oceans, 2001, 34, 145-163.	0.7	15
27	Three-Dimensional Effects in High-Drag-State Flows over Long Ridges. Journals of the Atmospheric Sciences, 2001, 58, 1051-1065.	0.6	56
28	The Large-Scale Effects of Flow over Periodic Mesoscale Topography. Journals of the Atmospheric Sciences, 2001, 58, 1477-1492.	0.6	30
29	On the Transfer of Momentum by Trapped Lee Waves: Case of the IOP 3 of PYREX. Journals of the Atmospheric Sciences, 2001, 58, 3563-3580.	0.6	21
30	Coriolis effects on orographic and mesoscale flows. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 601-633.	1.0	28
31	Assessment of which scales of orography can be credibly resolved in a numerical model. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 1225-1237.	1.0	29
32	Filtered non-hydrostatic models in pressure-related coordinates. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 1277-1292.	1.0	4
33	On The Small-Scale Dynamics Of Flow Splitting In The Rhine Valley During A Shallow Foehn Event. Boundary-Layer Meteorology, 2001, 99, 277-296.	1.2	24
34	Mesoscale mountains and the larger-scale atmospheric dynamics: A review. International Geophysics, 2002, 83, 29-42.	0.6	17
35	Atmospheric models, GPS and InSAR measurements of the tropospheric water vapour field over Mount Etna. Geophysical Research Letters, 2002, 29, 11-1-11-4.	1.5	101
36	Atmospheric water vapour correction to InSAR surface motion measurements on mountains: results from a dense GPS network on Mount Etna. Physics and Chemistry of the Earth, 2002, 27, 363-370.	1.2	65

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37	VHF radar measurements and model simulations of mountain waves over Wales. Quarterly Journal of the Royal Meteorological Society, 2002, 128, 185-204.	1.0	21
38	Large-Scale Flow Response to Short Gravity Waves Breaking in a Rotating Shear Flow. Journals of the Atmospheric Sciences, 2003, 60, 1691-1704.	0.6	15
39	An Analytical Model of Mountain Wave Drag for Wind Profiles with Shear and Curvature. Journals of the Atmospheric Sciences, 2004, 61, 1040-1054.	0.6	35
40	The Effect of Wind Shear and Curvature on the Gravity Wave Drag Produced by a Ridge. Journals of the Atmospheric Sciences, 2004, 61, 2638-2643.	0.6	20
41	Boundary-layer variations due to orographic-wave breaking in the presence of rotation. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 2991-3014.	1.0	16
42	Treatment of LBCs in 2D simulation of convection over hills. Advances in Atmospheric Sciences, 2004, 21, 573-586.	1.9	1
43	The accuracy of surface elevations in forward global barotropic and baroclinic tide models. Deep-Sea Research Part II: Topical Studies in Oceanography, 2004, 51, 3069-3101.	0.6	129
44	Determining radio wave delay by non-hydrostatic atmospheric modelling of water vapour over mountains. Physics and Chemistry of the Earth, 2004, 29, 139-148.	1.2	30
45	Validation of the Coupled NCEP Mesoscale Spectral Model and an Advanced Land Surface Model over the Hawaiian Islands. Part II: A High Wind Event*. Weather and Forecasting, 2005, 20, 873-895.	0.5	16
46	A Topographic Drag Closure Built on an Analytical Base Flux. Journals of the Atmospheric Sciences, 2005, 62, 2302-2315.	0.6	58
47	Resonant gravity-wave drag enhancement in linear stratified flow over mountains. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 1795-1814.	1.0	21
48	Extension of an orographic-drag parametrization scheme to incorporate orographic anisotropy and flow blocking. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 1893-1921.	1.0	67
49	The effect of rotation on the pressure drag force produced by flow around long mountain ridges. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 1321-1338.	1.0	15
50	Fourier-Ray Modeling of Short-Wavelength Trapped Lee Waves Observed in Infrared Satellite Imagery near Jan Mayen. Monthly Weather Review, 2006, 134, 2830-2848.	0.5	21
51	A linear model of gravity wave drag for hydrostatic sheared flow over elliptical mountains. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 2439-2458.	1.0	27
52	Sensitivity of resolved mountain drag to model resolution for MAP case-studies. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 1467-1487.	1.0	27
53	Lee waves from a sphere in a stratified flow. Journal of Fluid Mechanics, 2007, 574, 273-315.	1.4	30
54	Internal wave drag in stratified flow over mountains on a beta plane. Quarterly Journal of the Royal Meteorological Society, 2008, 134, 11-19.	1.0	2

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55	Asymptotic gravity wave drag expressions for non-hydrostatic rotating flow over a ridge. Quarterly Journal of the Royal Meteorological Society, 2008, 134, 271-276.	1.0	3
56	Structure of the precipitable water field over Mount Etna. Tellus, Series A: Dynamic Meteorology and Oceanography, 2008, 60, 679-687.	0.8	6
57	Mountain Waves in Two-Layer Sheared Flows: Critical-Level Effects, Wave Reflection, and Drag Enhancement. Journals of the Atmospheric Sciences, 2008, 65, 1912-1926.	0.6	21
58	Supercritical rotating flow over topography. Physics of Fluids, 2009, 21, 066601.	1.6	4
59	On the Momentum Fluxes Associated with Mountain Waves in Directionally Sheared Flows. Journals of the Atmospheric Sciences, 2009, 66, 3419-3433.	0.6	24
60	Gravity wave breaking in easterly flow over Greenland and associated low level barrier- and reverse tip-jets. Meteorology and Atmospheric Physics, 2009, 104, 191-197.	0.9	21
61	Assessing wind profile effects on the global atmospheric torque. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 807-814.	1.0	10
62	A review of recent advances in understanding the meso- and microscale properties of the severe Bora wind. Tellus, Series A: Dynamic Meteorology and Oceanography, 2009, 61, 1-16.	0.8	148
63	A coupled mesoscale-model Fourier-method for idealized mountain-wave simulations over Hawaii. Meteorology and Atmospheric Physics, 2010, 108, 71-81.	0.9	2
64	The accuracy of linear theory for predicting mountain-wave drag: Implications for parametrization schemes. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 429-441.	1.0	7
65	Momentum Fluxes of Gravity Waves Generated by Variable Froude Number Flow over Three-Dimensional Obstacles. Journals of the Atmospheric Sciences, 2010, 67, 2260-2278.	0.6	28
66	The Implementation of Regional Atmospheric Model Numerical Algorithms for CBEA-Based Clusters. Lecture Notes in Computer Science, 2010, , 525-534.	1.0	0
67	Momentum Flux and Flux Divergence of Gravity Waves in Directional Shear Flows over Three-Dimensional Mountains. Journals of the Atmospheric Sciences, 2012, 69, 3733-3744.	0.6	16
68	Using a Mesoscale Meteorological Model to Reduce the Effect of Tropospheric Water Vapour from DInSAR Data: A Case Study for the Island of Tenerife, Canary Islands. Pure and Applied Geophysics, 2012, 169, 1425-1441.	0.8	13
69	Dynamically-Driven Winds. Springer Atmospheric Sciences, 2013, , 121-218.	0.4	30
70	Idealized dry quasi 2D mesoscale simulations of cold-air outbreaks over the marginal sea ice zone with fine and coarse resolution. Journal of Geophysical Research D: Atmospheres, 2013, 118, 8787-8813.	1.2	36
71	Gravity wave momentum flux in directional shear flows over three-dimensional mountains: Linear and nonlinear numerical solutions as compared to linear analytical solutions. Journal of Geophysical Research D: Atmospheres, 2013, 118, 7670-7681.	1.2	12
72	The physics of orographic gravity wave drag. Frontiers in Physics, 2014, 2, .	1.0	55

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73	The gravity wave momentum flux in hydrostatic flow with directional shear over elliptical mountains. <i>European Journal of Mechanics, B/Fluids</i> , 2014, 47, 16-31.	1.2	17
74	The Impact of Finite-Amplitude Bottom Topography on Internal Wave Generation in the Southern Ocean. <i>Journal of Physical Oceanography</i> , 2014, 44, 2938-2950.	0.7	61
75	Impact of non-hydrostatic effects and trapped lee waves on mountain-wave drag in directionally sheared flow. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2015, 141, 1572-1585.	1.0	7
76	Systematic assessment of atmospheric uncertainties for InSAR data at volcanic arcs using large-scale atmospheric models: Application to the Cascade volcanoes, United States. <i>Remote Sensing of Environment</i> , 2015, 170, 102-114.	4.6	72
77	Turbulence generation by mountain wave breaking in flows with directional wind shear. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 2715-2726.	1.0	12
78	A New Theory for Downslope Windstorms and Trapped Mountain Waves. <i>Journals of the Atmospheric Sciences</i> , 2016, 73, 3585-3597.	0.6	16
79	Another look on the structure of mountain waves: A spectral perspective. <i>Atmospheric Research</i> , 2017, 191, 156-163.	1.8	11
80	Boundary-Layer Development and Low-level Baroclinicity during High-Latitude Cold-Air Outbreaks: A Simple Model. <i>Boundary-Layer Meteorology</i> , 2017, 162, 91-116.	1.2	14
81	Drag associated with 3D trapped lee waves over an axisymmetric obstacle in two-layer atmospheres. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2017, 143, 3244-3258.	1.0	6
82	Impacts of Horizontal Propagation of Orographic Gravity Waves on the Wave Drag in the Stratosphere and Lower Mesosphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 11,301.	1.2	15
83	Systematic Assessment of Atmospheric Uncertainties for InSAR Data at Volcanic Arcs Using Large-Scale Atmospheric Models: Application to the Cascade Volcanoes. <i>Springer Theses</i> , 2017, , 59-90.	0.0	1
84	Mountain-Wave Turbulence in the Presence of Directional Wind Shear over the Rocky Mountains. <i>Journals of the Atmospheric Sciences</i> , 2018, 75, 1285-1305.	0.6	12
85	Breeze effects at a large artificial lake: summer case study. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 5191-5210.	1.9	15
86	A Gravity Wave Drag Matrix for Complex Terrain. <i>Journals of the Atmospheric Sciences</i> , 2018, 75, 2599-2613.	0.6	7
87	Atmospheric mountain wave generation on Venus and its influence on the solid planet's rotation rate. <i>Nature Geoscience</i> , 2018, 11, 487-491.	5.4	34
88	Effect of Wind Speed and Leads on Clear-Sky Cooling over Arctic Sea Ice during Polar Night. <i>Journals of the Atmospheric Sciences</i> , 2019, 76, 2481-2503.	0.6	21
89	Reflection of nonlinear mountain waves by critical levels: behaviour of the reflection coefficient. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2020, 146, 1009-1025.	1.0	2
90	Impacts of wind profile shear and curvature on the parameterized orographic gravity wave stress in the Weather Research and Forecasting model. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2020, 146, 3086-3100.	1.0	2

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91	Dynamics and oceanic response of the Madeira tipâ€žets. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 3048-3063.	1.0	11
92	Impacts of Subgrid Orographic Drag on the Summer Monsoon Circulation and Precipitation in East Asia. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032337.	1.2	13
93	The effect of a stable boundary layer on orographic gravityâ€žwave drag. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 321-340.	1.0	2
94	A Modeling Study of Rainbands Upstream from Western Japan during the Approach of Typhoon Tokage (2004). Atmosphere, 2021, 12, 1242.	1.0	1
95	The Representation of Gravity Waves in Atmospheric General Circulation Models (GCMs). , 2010, , 685-699.		8
96	The representation of sub-grid scale orography in GCMs. , 1997, , 275-290.		2
98	Numerical Study on Flow Pass of a Three-Dimensional Obstacle under a Strong Stratification Condition. Journal of Applied Meteorology and Climatology, 1998, 37, 1047-1054.	1.7	9
99	Numerical Simulations of the Barrier Jet over Northwestern Taiwan during the Mei-Yu Season. Monthly Weather Review, 2003, 131, 1396-1407.	0.5	22
100	A Numerical Study of the Local Downslope Wind “Yamaji-kaze” in Japan. Journal of the Meteorological Society of Japan, 1993, 71, 247-272.	0.7	44
101	Acoustic Filtration in Pressure-Coordinate Models. Fluid Mechanics and Its Applications, 2001, , 221-226.	0.1	0
102	A Weakly Nonlinear Correction for the Linear Mountain Drag Formula. Papers in Meteorology and Geophysics, 1997, 48, 67-71.	0.9	0
103	On the High Winds in the Tianshan Grand Canyon in Northwest China: General Features, Synoptic Conditions, and Mesoscale Structures. Frontiers in Earth Science, 0, 10, .	0.8	0
104	On the Key Dynamical Processes Supporting the 21.7 Zhengzhou Record-breaking Hourly Rainfall in China. Advances in Atmospheric Sciences, 2023, 40, 337-349.	1.9	35